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Dear Mr. Maloof:

As per your request, the following summarizes some of the scientific literature that indicates people are aware of their sleepiness prior to having a drowsy driving crash. The cited scientific literature is current up to midway through 2006. There are likely a few more relevant studies since then, which I would locate but time does not permit.

Please be advised that if I had additional facts about the case (e.g., time of day of crash, angle of roadway departure, driver prior sleep and work histories, etc.), I would likely be able to cite additional scientific evidence that may be relevant to your case.

Awareness of sleepiness prior to falling asleep while driving

Both laboratory studies, including those using driving simulators, as well as large scale field studies, including those involving professional commercial truck drivers (sponsored by the U.S. Department of Transportation) fail to support the view that someone could suddenly fall asleep while driving a motor vehicle without having experienced sleepiness or any sign of drowsiness before falling asleep.^{14,16,18,23,25,27,30,31,32,39,40,42,45} These studies show that before people fall asleep at the wheel and drift out of lane, depart the roadway, or collide with another vehicle or stationary object, the driver experiences increased subjective sleepiness, struggles to stay awake, and there are both behavioral or physiological signs of drowsiness present. The latter signs have been discovered in experiments and field studies in which healthy adult subjects were objectively monitored with various sensors and video. These behavioral and physiological signs of sleepiness/drowsiness include increased slow eyelid closures, increased head droop, increased intermittent microsleeps, slowing of brain rhythm (EEG) frequencies, increased lapses of attention, increased lane tracking variability, slowed reaction times, etc.^{14,16,18,25,26,27,31,32,42} On vigilance-based tasks like driving, reaction times to visual stimuli slow steadily for 10 minutes prior to falling asleep (i.e., prior to a frank sleep attack),¹⁹ suggesting that falling asleep is a progressive process, not sudden and unexpected.

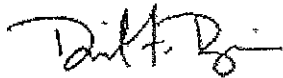
Moreover, studies show that drivers are aware of their sleepiness and their struggle to stay awake prior to crashing, even if they cannot recall actually falling asleep.^{23,25,26,27,31,39,42} Increasing subjective sleepiness (i.e., self-awareness of sleepiness) and fighting sleep onset while driving

EXHIBIT 5

have been found to be associated with increasing lane drifting.⁴² The likelihood of falling asleep was highly correlated with increasing self-awareness of sleepiness. Thus, there is extensive evidence that someone cannot fall asleep while driving and have an "accident" without experiencing a sustained period of increasing sleepiness of which they are aware, as well as behavioral signs of sleepiness, requiring them to fight sleep onset.

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Date